AMENDMENTS TO THE CLAIMS

1-9. **(Canceled)**

10. **(Currently amended)** A method of preserving motor function in a mammal ~~afflicted~~ with symptoms of or at risk of amyotrophic lateral sclerosis, comprising administering to said mammal a morphogen, ~~comprising~~ wherein the morphogen:

(1) comprises a dimeric protein having an amino acid sequence ~~selected from the group consisting of a sequence~~ with:

(a) ~~having~~ at least 70% homology with the C-terminal seven-cysteine skeleton of human OP-1, residues 330-431 of SEQ ID NO: 2;

(b) ~~having~~ greater than 60% amino acid sequence identity with said C-terminal seven-cysteine skeleton of human OP-1;

(c) defined by Generic Sequence 7, SEQ ID NO: 4;

(d) defined by Generic Sequence 8, SEQ ID NO: 5;

(e) defined by Generic Sequence 9, SEQ ID NO: 6;

(f) defined by Generic Sequence 10, SEQ ID NO: 7~~, and~~; or

(g) defined by OPX, SEQ ID NO: 3~~;~~; and

(2) ~~wherein said morphogen~~ stimulates production of an N-CAM or L1 isoform by an NG108-15 cell *in vitro*~~.~~;

whereby motor function is preserved in said mammal.

11. **(Canceled)**

12. **(Currently amended)** A method of preserving motor function in a mammal ~~afflicted~~ with symptoms of or at risk of a spinal cord injury, comprising administering to said mammal a morphogen ~~comprising~~, wherein the morphogen:

(1) comprises a dimeric protein having an amino acid sequence ~~selected from the group consisting of a sequence~~ with:

(a) ~~having~~ at least 70% homology with the C-terminal seven-cysteine skeleton of human OP-1, residues 330-431 of SEQ ID NO: 2;

(b) ~~having~~ greater than 60% amino acid sequence identity with said C-terminal seven-cysteine skeleton of human OP-1;

(c) defined by Generic Sequence 7, SEQ ID NO: 4;

(d) defined by Generic Sequence 8, SEQ ID NO: 5;

(e) defined by Generic Sequence 9, SEQ ID NO: 6;

(f) defined by Generic Sequence 10, SEQ ID NO: 7~~, and~~; or

(g) defined by OPX, SEQ ID NO: 3~~,~~; and

(2) ~~wherein said morphogen~~ stimulates production of an N-CAM or L1 isoform by an NG108-15 cell *in vitro*~~.~~;

whereby motor function is preserved in said mammal.

13-18. **(Canceled)**

19. **(Currently amended)** A method of preserving motor function in a mammal ~~afflicted~~ with symptoms of or at risk of amyotrophic lateral sclerosis, comprising administering to said mammal a morphogen selected from ~~the group consisting of~~: human OP-1, mouse OP-1, human OP-2, mouse OP-2,60A, GDF-l, BMP2A, BMP2B, DPP, Vgl, Vgr-1, BMP3, BMP5, ~~and~~ or BMP6, wherein said morphogen stimulates production of an N-CAM or Ll isoform by an NG108-15 cell *in vitro* whereby motor function is preserved in said mammal.

20. **(Canceled)**

21. **(Currently amended)** A method of preserving motor function in a mammal ~~afflicted~~ with symptoms of or at risk of a spinal cord injury, comprising administering a morphogen selected from ~~the group consisting of~~: human OP-1, mouse OP-1, human OP-2, mouse OP-2, 60A, GDF-1, BMP2A, BMP2B, DPP, Vgl, Vgr-1, BMP3, BMP5, ~~and~~ or BMP6, wherein said morphogen stimulates production of an N-CAM or L1 isoform by an NG108-15 cell *in vitro* whereby motor function is preserved in said mammal.

22-23. **(Canceled)**

24. **(New)** The method of claim 10, wherein the morphogen comprises a dimeric protein having an amino acid sequence with at least 70% homology with the C-

terminal seven-cysteine skeleton of human OP-1, residues 330-431 of SEQ ID NO: 2.

25. **(New)** The method of claim 10, wherein the morphogen comprises a dimeric protein having an amino acid sequence with greater than 60% amino acid sequence identity with said C-terminal seven-cysteine skeleton of human OP-1.

26. **(New)** The method of claim 12, wherein the morphogen comprises a dimeric protein having an amino acid sequence with at least 70% homology with the C-terminal seven-cysteine skeleton of human OP-1, residues 330-431 of SEQ ID NO: 2.

27. **(New)** The method of claim 12, wherein the morphogen comprises a dimeric protein having an amino acid sequence with greater than 60% amino acid sequence identity with said C-terminal seven-cysteine skeleton of human OP-1.